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NOTICE OF ALLOWANCE AND FEE(S) DUE

23455 7590 07/28/2009

EXXONMOBIL CHEMICAL COMPANY
5200 BAYWAY DRIVE
P.O. BOX 2149
BAYTOWN, TX 77522-2149

EXAMINER

LEE, RIP A

ART UNIT

PAPER NUMBER

1796

DATE MAILED: 07/28/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,351	08/04/2003	Chon Yie Lin	2002B107A	8824

TITLE OF INVENTION: PLASTICIZED POLYOLEFIN COMPOSITIONS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	10/28/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail Stop ISSUE FEE**
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

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23455 7590 07/28/2009

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BAYTOWN, TX 77522-2149

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Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,351	08/04/2003	Chon Yie Lin	2002B107A	8824

TITLE OF INVENTION: PLASTICIZED POLYOLEFIN COMPOSITIONS

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nonprovisional	NO	\$1510	\$300	\$0	\$1810	10/28/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
LEE, RIP A	1796	524-491000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).	2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
<input type="checkbox"/> Change of correspondence address (or Change of Correspondence Address Form PTO/SB/122) attached. <input type="checkbox"/> "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.	1 _____ 2 _____ 3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): Individual Corporation or other private group entity Government

4a. The following fee(s) are submitted:

- Issue Fee
- Publication Fee (No small entity discount permitted)
- Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- A check is enclosed.
- Payment by credit card. Form PTO-2038 is attached.
- The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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			ART UNIT	PAPER NUMBER
			1796	
				DATE MAILED: 07/28/2009

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability	Application No.	Applicant(s)
	10/634,351	LIN ET AL.
	Examiner	Art Unit
	RIP A. LEE	1796

-- **The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTO-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to 08 May 2009.
2. The allowed claim(s) is/are 1,2,4-12,16,17,20,22,24-33,35,57-62,65-70 and 73-85.
3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some* c) None of the:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of
Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. Notice of References Cited (PTO-892)
2. Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date See Continuation Sheet
4. Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. Notice of Informal Patent Application
6. Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. Examiner's Amendment/Comment
8. Examiner's Statement of Reasons for Allowance
9. Other _____.

/David Wu/
Supervisory Patent Examiner, Art Unit 1796

Continuation of Attachment(s) 3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date: 01-16-2009; 05-08-2009.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Claim 1, line 4	replace "Kinematic" with "kinematic"
Claim 1, line 8	replace "C4 to C20" with "C ₄ to C ₂₀ "
Claim 7, line 2	insert "kinematic" prior to "viscosity"
Claim 17, line 4	replace "C6 to C200" with "C ₆ to C ₂₀₀ "
Claim 17, line 5	replace "Kinematic" with "kinematic"
Claim 27, line 2	insert "kinematic" prior to "viscosity"
Claim 33, line 3	replace "Kinematic" with "kinematic"
Claim 59, line 4	replace "Kinematic" with "kinematic"
Claim 62, line 3	replace "Kinematic" with "kinematic"
Claim 65, line 4	replace "Kinematic" with "kinematic"
Claim 66, line 4	replace "Kinematic" with "kinematic"
Claim 67, line 4	replace "Kinematic" with "kinematic"
Claim 68, line 3	replace "Kinematic" with "kinematic"
Claim 69, line 4	replace "Kinematic" with "kinematic"
Claim 70, line 3	replace "Kinematic" with "kinematic"

Claim 73, line 4	replace “Kinematic” with “kinematic”
Claim 74, line 4	replace “Kinematic” with “kinematic”
Claim 75, line 3	replace “Kinematic” with “kinematic”
Claim 76, line 3	replace “Kinematic” with “kinematic”
Claim 77, line 4	replace “Kinematic” with “kinematic”
Claim 78, line 4	replace “Kinematic” with “kinematic”
Claim 79, line 3	replace “Kinematic” with “kinematic”
Claim 80, line 4	replace “Kinematic” with “kinematic”
Claim 81, line 3	replace “Kinematic” with “kinematic”
Claim 82, line 4	replace “Kinematic” with “kinematic”
Claim 83, line 4	replace “Kinematic” with “kinematic”
Claim 84, line 4	replace “Kinematic” with “kinematic”
Claim 85, line 4	replace “Kinematic” with “kinematic”

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance: Claims 1, 2, 4-12, 16, 17, 20, 22, 24-33, 35, 57-62, 65-70, and 73-85 are allowed.

The present invention is drawn to a plasticized polyolefin composition comprising polyolefin and non-functionalized plasticizer wherein the non-functionalized plasticizer comprises C₆ to C₂₀₀ paraffins having a pour point of less than -30 °C and a kinematic viscosity of from 10 cSt to 500 cSt at 100 °C and wherein elastomers are substantially absent from the composition. See claims for full details.

In one embodiment (claims 1, 2, 4-12, 16, 20, 57 and 58), the polyolefin is a propylene homopolymer or propylene copolymer having up to 0.1 to 30 wt % of co-monomer selected from the group consisting of ethylene and C₄ to C₂₀ alpha-olefins, said propylene homopolymer or propylene copolymer having a melt flow rate of from 0.1 to 2500 dg/min, and polyethylene homopolymer and copolymer having M_w of from 500 to 10,000 is substantially absent from the composition.

In another embodiment (claims 17, 22, 24-32, 35, 60, and 61), the polyolefin is a propylene impact copolymer comprising 40 % to 95 % by weight of a component A and from 5 % to 60 % by weight of a component B.

In another embodiment (claim 33), the polyolefin is selected from propylene homopolymers, propylene compolymers, propylene impact copolymers that are reactor blends, said polyolefin having a melt flow rate of from 0.1 to 2500 dg/min, and polyethylene homopolymer and copolymer having M_w of from 500 to 10,000 is substantially absent from the composition.

In another embodiment (claims 65-85), the plasticized polyolefin composition further comprises specified plastomer or metallocene catalyzed copolymer of ethylene and 1-butene, 1-hexene, or 1-octene.

Another aspect of the invention (claims 59 and 62) is drawn to a plasticized polyolefin composition comprising polyolefin and non-functionalized plasticizer wherein the non-functionalized plasticizer comprises C₆ to C₂₀₀ paraffins having a pour point of less than -60 °C

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and a kinematic viscosity of from 10 cSt to 500 cSt at 100 °C and wherein elastomers are substantially absent from the composition.

Relevant references cited in prosecution include:

Iwasaki *et al.* (U.S. 5,240,966) teaches preparation of granular colorant by adsorption of 150 g of Lucant HC-10 hydrocarbon (blend of C₁₀ oligomer and C₂/α-olefin liquid, KV₁₀₀ = 10, pour point = -50 °C), 500 g of spherical porous polypropylene (MI = 30 g/10 min), and colorant, followed by lyophilization to remove volatiles. In this case, Lucant HC-10 would be removed. Furthermore, claims preclude presence of ethylene copolymer having M_w of from 500 to 10,0000. It is maintained that the person of ordinary skill in the art would not have found it obvious to stop the process shown in Iwasaki *et al.* at an intermediate stage in order to isolate spherical polypropylene particles having hydrocarbon adsorbed thereon. Therefore, it is deemed that the claimed invention is patentably distinct over the disclosure of Iwasaki *et al.*

Sasaki *et al.* (JP 11-49903) discloses a polyethylene resin (containing propylene comonomer) comprising paraffinic oil having a kinematic viscosity of 20-800 cSt at 40 °C and a pour point of -40 to 0 °C. The paraffinic oil used in the invention is Diana PW-90 and Diana PW-380, both of which have pour points of -15 °C. The reference does not disclose use of the claimed polypropylene resin. In view of exemplified paraffinic oils, it is maintained that one having ordinary skill in the art would not have found it obvious, based on the general ranges of kinematic viscosity and pour point cited in the patent, to make the claimed composition having non-functionalized plasticizer with a pour point of less than -30 °C and a kinematic viscosity of from 10 cSt to 500 cSt at 100 °C. Therefore, it is concluded that the claimed invention is patentably distinct over the invention of Sasaki *et al.*

Suokas *et al.* (WO 98/44041) discloses a melt blend of a polyolefin matrix and liquid polyalphaolefin plasticizer comprised of oligomers of C₆-C₁₂ alpha olefins. Exemplary plasticizers are commercially available as Nexbase 2004 (KV₁₀₀ = 3.8-4.1 cSt, pour point = -69 °C) and Nexbase 2008 (KV₁₀₀ = 7.9 cSt, pour point = -60 °C). Non-functionalized plasticizers of the prior art do not exhibit the claimed properties.

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Tabata *et al.* (JP 9-208761) teaches a composition comprising 100 parts by weight of a propylene based block copolymer (1-40 wt % propylene homopolymer and 60-99 wt % propylene-ethylene random copolymer components), 40-150 parts by weight of plasticizer, and 20-100 parts by weight of ethylene/α-olefin plastomer containing 2-15 mole % of a C₄₊ alpha olefin comonomer. A useful plasticizer is Lucant HC-40 (ethylene/α-olefin copolymer, pour point = -40 °C, KV₁₀₀ = 40 cSt, M_w = 1545). Claims preclude presence of ethylene copolymer having M_w of from 500 to 10,000.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Information Disclosure Statement

References designated AD, AK, AN, and AU in the information disclosure statement filed on January 16, 2009 were not considered as they relate to subject matter not germane to the instant invention.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (571)272-1104. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached at (571)272-1114. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <<http://pair-direct.uspto.gov>>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

/Rip A. Lee/
Examiner, Art Unit 1796

July 21, 2009
/David Wu/
Supervisory Patent Examiner, Art Unit 1796